

# The anesthetic onset and duration of a new lidocaine/prilocaine gel intra-pocket anesthetic (Oraqix®) for periodontal scaling/root planing

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## Abstract

**Background:** A new non-injection anesthetic, lidocaine/prilocaine gel (Oraqix®, AstraZeneca) in a reversible thermosetting system, has been developed to provide local anesthesia for scaling/root planing (SRP). The aim of this study was to determine the anesthetic onset and duration of the gel for SRP in patients with periodontitis.

**Methods:** 30 patients were randomized to either 30 s, 2 min, or 5 min of treatment with the gel prior to SRP of a tooth. The gel was applied to periodontal pockets with a blunt applicator. On completion of the SRP of each tooth (2-3 teeth treated/patient), the patients rated their pain on a 100-mm visual analogue scale (VAS).

**Results:** The median VAS pain score was 7.5 mm in the 30-s group, 28.5 mm in the 2-min group, and 15.5 mm in the 5-min group, with a significant difference between the 30-s and 2-min groups ( $p=0.03$ ). In 2 patients in the 5-min group, but none in the other groups, the SRP was interrupted due to pain. The mean duration of anesthesia measured as pain on probing were 18.1, 17.3, and 19.9 min in the 30-s, 2-min, and 5-min groups, respectively. There were no reports of numbness of the tongue, lip, or cheek, neither were there any adverse local reactions in the oral mucosa. The gel was easy to apply and did not interfere with the SRP procedure.

**Conclusion:** Oraqix® provides anesthesia after an application time of 30 s, with a mean duration of action of about 17 to 20 min.